

### CLAIMS

1-12. (Canceled)

13. (Currently Amended) A medical testing device for evoking and measuring response signals in a human patient, comprising:

a processing means, said processing means configured with a software application to generate at least one predetermined sequence of stimuli signals for evoking a response in a human patient;

a signal transmission means operatively coupled to said processing means, said signal transmission means configured to transmit said at least one sequence of stimuli signals to the human patient;

a signal receiving means operatively coupled to said processing means, said signal receiving means configured to receive at least one unfiltered response signal from said human patient;

wherein said processing means is further configured with a software application to process said received unfiltered response signal to extract a sequence of evoked response signals associated with said at least one predetermined sequence of stimuli signals; and

~~The medical testing device of claim 11~~ wherein said signal transmission means is a light source.

14. (Currently Amended) A medical testing device for evoking and measuring response signals in a human patient, comprising:

a processing means, said processing means configured with a software application to generate at least one predetermined sequence of stimuli signals for evoking a response in a human patient;

a signal transmission means operatively coupled to said processing means, said signal transmission means configured to transmit said at least one sequence of stimuli signals to the human patient;

a signal receiving means operatively coupled to said processing means, said signal receiving means configured to receive at least one unfiltered response signal from said human patient;

wherein said processing means is further configured with a software application to process said received unfiltered response signal to extract a sequence of evoked response signals associated with said at least one predetermined sequence of stimuli signals; and

~~The medical testing device of claim 11~~ wherein said signal receiving means includes at least one microphone.

15. (Canceled)

16. (Currently Amended) The medical testing device of ~~Claim 11~~ claim 13 wherein said predetermined sequence of stimuli signals is an encoded sequence.

17. (New) The medical testing device of claim 14 wherein said predetermined sequence of stimuli signals is an encoded sequence.